

The opinion in support of the decision being entered
today was not written for publication and is
not binding precedent of the Board

Paper No. 22

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JONATHAN D. ALBERT,
BARRETT COMISKEY, JOSEPH M. JACOBSON,
LIBING ZHANG, ANDREW LOXLEY,
ROBERT FEENEY, PAUL DRZAIC,
and IAN MORRISON

Appeal No. 2001-1966
Application 09/140,846

ON BRIEF

Before THOMAS, FLEMING and GROSS, Administrative Patent Judges.
THOMAS, Administrative Patent Judge.

DECISION ON APPEAL

Appellants have appealed to the Board from the examiner's
final rejection of claims 1-37. Representative claims 1 and 30
are reproduced below:

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1. An encapsulated electrophoretic display, comprising a capsule comprising particles dispersed in a suspending fluid, wherein said particles contain a liquid.

30. A process for creating an encapsulated electrophoretic display, comprising the steps of:

(a) encapsulating a dye in a liquid into a plurality of first capsules; and

(b) encapsulating said plurality of first capsules into a second capsule in a binder.

The following references are relied on by the examiner:

Chang	4,314,013	Feb. 2, 1982
Saxe et al. (Saxe)	5,650,872	July 22, 1997
Jacobson	6,124,851	Sep. 26, 2000
	(filing date July 20, 1995)	

Claims 1-37 stand rejected under 35 U.S.C. § 103. As evidence of obviousness, in a first stated rejection, the examiner relies upon Saxe in view of Chang as to all of these claims on appeal. In a second stated rejection of claims 1-4 and 30, the examiner relies upon Jacobson alone.

Rather than repeat the positions of the appellants and the examiner, reference is made to the briefs and answer for the respective details thereof.

OPINION

We reverse both stated rejections of the claims on appeal because we have concluded the examiner has not established a prima facie case of obviousness. On the other hand, we institute new grounds of rejection of the claims on appeal under the second paragraph of 35 U.S.C. § 112.

In the context of the entire disclosed invention, we make note initially of Figure 1. The particles 15 shown in this figure may contain fluid. As such, they each may be considered a capsule. The depicted capsule 13 contains a plurality of particles/first capsules 15 in a suspending fluid 17. All of this is placed within binder 11 between electrodes 16-16'. Taken in this light, the subject matter of independent claims 1 and 30 on appeal, the only claims argued by appellant in the starting point of the examiner's rejections, is made clear. The nature and placement of the binder recited in claim 30 is thus apparent when considered in the context of Figure 1 of the disclosed invention. There is no binder recited in claim 1, but the binder is additionally recited in dependent claim 2, which is not argued. The binder is, on the other hand, recited at the end of claim 30 on appeal. This claim recites that each of the

particles 15 of disclosed Figure 1 in turn may be considered to be a first capsule.

Essentially, we find that the applied prior art for each of these separately stated rejections does not teach or suggest the suspending fluid of independent claim 1 on appeal and the "second capsule in a binder" as recited in independent claim 30 on appeal.

As to the first stated rejection, the examiner apparently considers the light valve 27 in representative Figure 5 of Saxe as comprising the electrophoretic display of the preamble of representative claim 1 on appeal. The examiner considers the claimed capsule to be the dark droplets/globules/microdroplets 26, which element comprises "particles" 21. Note also the showings in various Figures 6 through 8B of Saxe. These particles 21 per se are not taught to be or to contain a liquid as required by independent claim 1 on appeal. The examiner relies upon the expansive teaching at column 7, lines 55-60 that any type of particle may be used for the particle 21 of the invention in Saxe, thus yielding the examiner's view that it would have been obvious to have utilized the particles 1 of Chang. The examiner considers these particles 1 of Chang to be

dispersed in a suspending fluid and that these particles contain a liquid.

It is not clear to us that the first resin 3 and the second resin 7 of the double encapsulated particle 1 in Chang is or comprises a fluid or liquid. The examiner's reliance upon column 5, lines 22-45 is, in our view, misplaced. The nature of the various resins discussed here as well as the fact that both first and second resins may be soluble in a liquid is not dispositive that they are or that the particles 1 may be suspended in a fluid or liquid. The mere solubility of the same resin having different molecular weights in a liquid medium does not necessarily argue that the resins themselves are liquids or otherwise fluids for purposes of combinability with Saxe and in meeting the limitations of the "suspending fluid" of claim 1 on appeal. At best we would have to speculate as to whether the resins are or comprise a fluid or liquid. Thus, even if we were to agree that it would have been obvious for the artisan to have combined Saxe and Chang, the subject matter of independent claim 1 on appeal in its entirety would not have been met.

As to claim 1, we note also that the nature of the film 24 in representative Figure 5 of Saxe is in the form of a cross-linked polymeric matrix material as discussed beginning at column

4, line 22. The subsequent discussion does not lead us to conclude that this material is a suspending fluid as in claim 1 on appeal. The corresponding discussion of films beginning at column 9, line 40 does not aid us in reaching a sufficient resolution of this issue as well.

As to claim 30, following a corresponding analysis just made with respect to claim 1, we conclude that the combination of Saxe and Chang does not lead us to the claimed "second capsule in a binder" as recited at the end of claim 30 on appeal. Although the claimed dispensing fluid of independent claim 1 is not recited in claim 30, the examiner's analysis appears to correlate the claimed first capsules in claim 30 with the particles 21 of Saxe which are in turn believed by the examiner to have been obvious to the artisan to have been embodied in the double encapsulated particles 1 of Chang. The examiner's analysis in the Answer does not correlate any particular element between the two references to the claimed binder. Following the examiner's analysis and apparent correlation with the subject matter of claim 1, it is not clear what the claimed liquid is to comprise. The two resins of Chang are not necessarily liquids to the extent we noted earlier in this opinion.

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As to the second stated rejection, we reach the same result as to both independent claims 1 and 30 on appeal. The examiner appears to be relying on Figure 7B in Jacobson and its corresponding discussion in the paragraph bridging columns 5 and 6 of this reference. Polymer dispersed liquid crystals (PDLC) 450 in Figure 7B are shown to be in the form of capsules and within a larger capsule 420, yet the reference is silent as to what the nature of the medium is, if any, within capsule 420 into which has been placed the polymer dispersed liquid crystals 450. We are thus left to speculate as to whether there is any "suspending fluid" as recited in independent claim 1 on appeal. As to independent claim 30, there is no teaching or suggestion that the capsule 420 has in turn been placed "in a binder" as recited at the end of claim 30 on appeal.

As to both stated rejections of the claims on appeal, in order for us to sustain the examiner's rejection under 35 U.S.C. § 103, we would need to resort to speculation or unfounded assumptions to supply deficiencies in the factual basis of the rejections. In re Warner, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967), cert. denied, 389 U.S. 1057 (1968), reh'g denied, 390 U.S. 1000 (1968). This we decline to do.

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Because we do not sustain the rejection of independent claims 1 and 30 on appeal, we also reverse the rejection of their respective dependent claims. Therefore, the decision of the examiner rejecting claims 1-37 under 35 U.S.C. § 103 is reversed.

Claims 1-37 are rejected under the second paragraph of 35 U.S.C. 112 as being indefinite. There is no recitation in the body of each of independent claims 1 and 30 on appeal of any display as required by the preamble, and there also is no feature recited in the body of either independent claim relating to any electrophoretic elements of any kind as they relate to the preamble of each claim. The various liquids, capsules and particles in the bodies of these claims are not said to be electrophoretic materials. Additionally, according to the nature of electrophoretic displays, they require at least a pair of electrodes for each claimed "a capsule" as in claim 1 or the "a second capsule" in claim 30. In these respects then, the claims on appeal do not appear to recite within the second paragraph of 35 U.S.C. § 112, what appellants regard as their invention. Additionally, it is indeed problematic what the metes and bounds of the subject matter of independent claims 1 and 30 on appeal are as well.

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In summary, we have reversed the rejections of all claims on appeal under 35 U.S.C. § 103. We have also introduced a new rejection of all claims on appeal under the second paragraph of 35 U.S.C. § 112. As such, the decision of the examiner is reversed.

This decision contains a new ground of rejection pursuant to 37 CFR § 1.196(b). 37 CFR § 1.196(b) provides that, "A new ground of rejection shall not be considered final for purposes of judicial review."

37 CFR § 1.196(b) also provides that the appellants, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of proceedings (§ 1.197(c)) as to the rejected claims:

(1) Submit an appropriate amendment of the claims so rejected or a showing of facts relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the application will be remanded to the examiner. . . .

(2) Request that the application be reheard under § 1.197(b) by the Board of Patent Appeals and Interferences upon the same record. . . .

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No time period for taking any subsequent action in
connection with this appeal may be extended under 37 CFR
§ 1.136(a).

REVERSED, 37 CFR § 1.196(b)

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Administrative Patent Judge)	
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